linear infrared lights are larger than that of the first pair of linear infrared lights,

wherein upper lights of the first and second pairs of said linear infrared lights are located over said substrate and lower lights of the first and second pairs of said linear infrared lights are located at a backside of said substrate.

4. (Amended) A method according to claim 2, wherein said semiconductor film comprises silicon compound represented by Si_xGe_{1-x}.

8. (Amended) A method for manufacturing semiconductor device comprising the steps of:

forming a semiconductor film over a substrate; and

irradiating said semiconductor film comprising silicon by scanning with at least two main linear infrared lights and two auxiliary linear infrared lights in a predetermined direction so as to form and move a temperature gradient in the semiconductor film,

wherein an upper light of the auxiliary linear infrared lights and an upper light of the main linear infrared lights are located over said semiconductor film and a lower light of the [illegible] linear infrared lights and a lower light of the main

linear infrared lights are located at an underside of said semiconductor film.

10. (Amended) A method according to claim 8, wherein said semiconductor film comprises silicon compound represented by Si_xGe_{1-x}.

14. (Amended) A method for manufacturing a semiconductor device comprising steps of:

forming a semiconductor film comprising silicon over a substrate; and

irradiating said semiconductor film with at least a pair of main linear infrared lights and a pair of auxiliary linear infrared lights while moving said substrate in a direction perpendicular to the linear infrared lights,

wherein an upper light of the auxiliary linear infrared lights and an upper light of the main linear infrared lights is located over said substrate and a lower light of the auxiliary linear infrared lights and a lower light of the main linear infrared lights is located at a backside of said substrate, and

wherein said semiconductor film is irradiated with said auxiliary lights prior to said main linear infrared lights.

16. (Amended) A method according to claim 14 wherein said semiconductor film comprises silicon compound represented by Si_xGe_{1-x}.

20. (Amended) A method for manufacturing semiconductor device comprising the steps of:

forming an amorphous semiconductor film comprising silicon over a substrate; and

crystallizing the semiconductor film by scanning with at least first and second upper linear infrared lights and first and second lower linear infrared lights in a predetermined direction, intensities of the second upper and lower linear infrared lights are larger than that of the first upper and lower linear infrared lights,

wherein said first and second upper linear infrared lights are located over said substrate and said first and second lower linear infrared lights are located at a backside of said substrate, and

wherein said predetermined direction is coincident with a direction of crystal growth in the semiconductor film.

22. (Amended) A method according to claim 20, wherein the first upper linear infrared lights and the first lower linear infrared lights are auxiliary lights, respectively.

25. (Amended) A method according to claim 20, wherein semiconductor film comprises silicon compound represented by Si_xGe_{1-x}.

29. (Amended) A method for manufacturing semiconductor device comprising the steps of:

forming an amorphous semiconductor film comprising silicon over a substrate; and

crystallizing the semiconductor film by scanning the semiconductor film with at least a pair of first upper and first lower linear infrared lights and a pair of second upper and second lower linear infrared lights in a direction in order to form and move a temperature gradient the semiconductor film,

wherein said upper linear infrared light are located over said semiconductor film and said at least two lower linear infrared light are located at an underside of said semiconductor film, and

wherein said direction is coincident with a direction of crystal growth to be proceeded in the semiconductor film.

30. (Amended) A method according to claim 29, wherein intensities of the first upper and first lower linear infrared lights are smaller than that of second upper and second lower linear infrared lights.

32. (Amended) A method according to claim 29, wherein the semiconductor film comprises silicon compound represented by Si_xGe_{1-x}.

36. (Amended) A method for manufacturing a semiconductor device comprising steps of:

forming an amorphous semiconductor film comprising silicon over a substrate; and

crystallizing said semiconductor film by irradiating said semiconductor film with at least a pair of main linear infrared lights and a pair of auxiliary linear infrared lights while moving said substrate in a perpendicular to the linear infrared lights,

wherein one of said main linear infrared lights and one of the auxiliary linear infrared lights are located over said substrate and the other one of said main linear infrared lights and the other one of the auxiliary linear infrared lights are located at a backside of said substrate, and

wherein an irradiating direction is coincident with a direction of crystal growth to be proceeded in the semiconductor film.

37. (Amended) A method according to claim 36, wherein said semiconductor film comprises silicon compound represented by Si_xGe_{1-x}.

41. (Amended) A method for manufacturing a semiconductor device comprising steps of:

forming an amorphous semiconductor film comprising silicon over a substrate; and

crystallizing said semiconductor film by scanning with first and second pairs of linear infrared lights in a direction perpendicular to a longitudinal direction of the linear infrared lights, each of said first and second pairs of linear infrared lights consisting of an upper light and a lower light,

wherein upper lights of the first and second pairs of linear infrared lights are located over said substrate and lower lights of the first and second pairs of linear infrared lights are located at a backside of said substrate, and

wherein said semiconductor film is irradiated with the first upper and lower lights prior to second upper and lower linear

42. (Amended) A method according to claim 41, wherein said semiconductor film comprises silicon compound represented by Si_xGe_{1-x}.